

Patent claims

1. A coolant condenser having a network composed of tubes and ribs, collecting tubes arranged on both sides
5 of the network and having a collector which is connected to one of the collecting tubes by means of at least one inflow opening and at least one outflow opening and is arranged in parallel with it and in which an insert which is connected to a closure stopper
10 and has filter means is arranged, the insert having a circumferential sealing means which is arranged between the inflow opening and the outflow opening, and the closure stopper being arranged in the region of the outflow opening, characterized in that the filter means
15 is embodied as a separate insert and as a functional unit and is arranged in the region of the outflow opening.

2. The coolant condenser as claimed in claim 1,
20 characterized in that the insert is of pot-shaped design and has a bottom, a wall and an edge, the wall having window-like breakthroughs which are covered by filter sieves and the sealing means which is embodied as a circumferential sealing lip being arranged at the
25 edge (8).

3. The coolant condenser as claimed in claim 1 or 2, characterized in that the insert is connected to the closure stopper in a detachable fashion by means of a
30 clip connection.

4. The coolant condenser as claimed in claim 1 or 2, characterized in that the insert is embodied in one piece with the closure stopper.

35 5. The coolant condenser as claimed in claim 4, characterized in that the insert and the closure stopper are manufactured as an injection molded part.

6. The coolant condenser as claimed in claim 5, characterized in that the injection molded part is manufactured from plastic.

5

7. The coolant condenser as claimed in claim 5, characterized in that the injection molded part is manufactured from an aluminum alloy.

10 8. The coolant condenser as claimed in one of claims 2 to 7, characterized in that the outer surface of the pot-shaped wall forms, with the inner wall of the collector in the region of the outflow opening, an annular chamber, and the inner surface of the pot-shaped wall and of the closure part form a free cavity.

15 9. The coolant condenser as claimed in one of claims 1 to 8, characterized in that desiccant in the form of small bags of granulate is positioned above the insert.

20 10. A coolant condenser having a network composed of tubes and ribs, collecting tubes arranged on both sides of the network and having a collector which is connected to one of the collecting tubes by means of at least one inflow opening and at least one outflow opening and is arranged in parallel with it and in which an insert which is connected to a closure stopper and has drying and filter means is arranged, the insert having a circumferential sealing means which is arranged between the inflow opening and the outflow opening, and the closure stopper being arranged in the region of the outflow opening, characterized in that the insert is embodied as a single-piece component, such as in particular an injection molded component, which is composed of the closure stopper and a cage-like sleeve.

11. The coolant condenser as claimed in claim 10,

characterized in that the sleeve has window-like breakthroughs which are covered by filter sieves.

12. The coolant condenser as claimed in claim 10 or
5 11, characterized in that the closure stopper has circumferential annular grooves for receiving O rings.

13. An insert part for a collector of a condenser of an air-conditioning system for motor vehicles, composed
10 of a closure stopper and a filter part which is connected to the closure stopper and has a circumferential sealing means, it being possible to insert the insert part from an end side of the collector, characterized in that the filter part is
15 embodied as a separate insert and functional unit.

14. The insert part as claimed in claim 13, characterized in that the insert is of pot-shaped design and has a bottom, a wall and an edge, the wall
20 having window-like breakthroughs which are covered by filter sieves and the sealing means which is embodied as a circumferential sealing lip being arranged at the edge.

25 15. The insert part as claimed in claim 13 or 14, characterized in that the insert is connected to the closure stopper in a detachable fashion by means of a clip connection.

30 16. The insert part as claimed in claim 13 or 14, characterized in that the insert is embodied in one piece with the closure stopper.

35 17. The insert part as claimed in claim 16, characterized in that the insert and the closure stopper are manufactured as an injection molded part.

18. The insert part as claimed in claim 17, characterized in that the injection molded part is

manufactured from plastic.

19. The insert part as claimed in claim 17,
characterized in that the injection molded part is
5 manufactured from an aluminum alloy.

20. An insert part for a collector of a condenser of
an air-conditioning system for motor vehicles, composed
of a closure stopper and having a dryer/filter
10 cartridge which is connected to the closure stopper, it
being possible to insert the insert part from an end
side of the collector, characterized in that the insert
part is embodied as a single-piece injection molded
part which is composed of the closure stopper and a
15 cage-like sleeve.

21. The insert part as claimed in claim 20,
characterized in that the sleeve has window-like
breakthroughs which are covered by filter sieves.
20

22. The insert part as claimed in claim 20 or 21,
characterized in that the closure stopper has
circumferential annular grooves for receiving O rings.

25 23. The insert part as claimed in one of claims 20 to
22, characterized in that the injection molded part is
manufactured from plastic.